REMARKS/ARGUMENTS

1. In response to the objection raised in paragraph 2 of the office action, the reference to the Stephen B. Wicker book on page 15 of the specification has been deleted.

2. In paragraph 6 of the Office Action, the Examiner has suggested that claims 6 and 8 to 11 are obvious in light of Conroy et al (**Conroy**) (US 5,686,705) in view of Dymetman et al ("Intelligent Paper ...") (**The Dymetman article**) and further in view of Dymetman (WO 99/50787) (**The Dymetman PCT**). In reply, the Applicants make the following arguments and amendments:

(a) The Examiner has suggested that Conroy discloses a *"map including coded data."* The "coded data" in the Conroy system is not disposed on the surface of the Conroy globe, but is stored in the Conroy microprocessor. The Examiner correctly refers to the points on the Conroy map *"whose geographical location represented by a unique combination of x and y coordinates, are coded and stored at specific addresses in the microprocessor."*

In order to more clearly distinguish the claimed coded data from Conroy's coded data stored in the microprocessor, the Applicants have sought to amend claims 6 and 11 to more clearly state that the claimed coded data is printed on the surface.

The Applicants submit that Conroy does not disclose *"a surface on which is disposed a map of a geographic area ... the surface having coded data disposed thereon"* as claimed in claim 1. Similar comments apply in relation to claim 11.

(b) The Examiner has argued that Conroy discloses a processor which *"determine[s] an orientation, of at least some of the coded data."* In reply, the Applicants note that Conroy does not disclose any coded data disposed on the surface. Nor does it disclose a processor which determines the orientation of the coded data disposed on the surface. The passages cited by the Examiner do not refer to the orientation of the coded data, but to the position of the Conroy stylus, as determined by its x and y coordinates.

(c) The Examiner correctly states that Conroy *"fails to specifically disclose printing a map, including coded data onto the surface, the map of the geographic area and the code data being printed **substantially simultaneously**."* However, the Examiner does not then go on to explain where such simultaneous printing is disclosed in either the Dymetman PCT or the Dymetman Article.

The Applicants submit that neither the Dymetman Article, nor the Dymetman PCT disclose such simultaneous printing. In contrast, the following sentences from the Dymetman Article teach that the coded layer of ink in the Dymetman arrangement is pre-printed by an authorised producer and the layer of conventional, visible ink is added later by a publisher:

"These sheets are produced by publishers, who buy apparently blank sheets of Intelligent Paper from an authorized producer. The publishers can mark them with conventional visible inks in any way they choose." (Page 394, lines 1 to 3)

"This way of proceeding exploits the natural tendency of publishers to buy Intelligent Paper sheets in bulk, so that it may be known by the first router that a certain number of consecutive page-ids are "owned" by a certain publisher." (Page 398, lines 4 to 7)

Similar comments appear in the Dymetman PCT. The Applicants submit that none of the citations disclose the substantially simultaneous printing of the map and the coded data and that the Dymetman Article and Dymetman PCT both teach away from such a technique.

3. For the above reasons, the Applicants submit that claims 6 and 11 are both novel and inventive over the prior art. Similar comments apply in relation to dependent claims 8 to 10 which add additional inventive features. The Examiner is requested to reconsider and withdraw his obviousness objections in light of the above amendments and arguments.

4. In paragraph 4 of the Office Action, the Examiner has maintained his rejection of claims 6 and 8 to 11 under 35 U.S.C. 112. The Examiner maintained his fair basis objection and rejected the Applicant's previous arguments by stating *"Applicant's arguments are not convincing because these features can not be founds anywhere in the specification."* In reply, the Applicant concedes that whilst the exact phrases mentioned by the Examiner do not appear verbatim in the specification, the Applicants submit that the features were (in the words of the test applied by the Examiner) *"described in the specification in such a way as to **reasonably** convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention."*

In the previous response, the Applicants submitted detailed arguments in comment 2 which stretched from pages 6 to 9 of the specification. The Examiner is again referred to those arguments and is requested to reconsider this fair basis issue from a reverse infringement perspective. That is, the Examiner is requested to consider the following question:

"If a person were to make the invention described in the specification, would that invention infringe the claims?"

If the answer is *"Yes"*, then the specification does provide fair basis for the claims, since the claimed features must be present in the hypothetically infringing invention described in the specification.

If the Examiner disagrees with this assessment, the Examiner is invited to respond in detail to each of the points made in comment 2 of our last response (reproduced as comment 5 below for the Examiner's ready reference), stating why the Examiner believes that one of ordinary skill in the art would understand the features described in the specification to fall outside the scope of the corresponding claimed features.

5. In paragraph 4 of the Official Action, the Examiner suggests that a number of claimed features were not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. In reply, the Applicant submits that those features were disclosed in the specification as filed.

Arguments in relation to each of the claimed features appear below:

(a) *"the map of the geographic area and the coded data being printed substantially simultaneously":*

(i) In Figure 1 and on page 10, lines 6 to 11 of the specification, *"netpages"* are described as including both coded data and graphic data: *"As illustrated in Figure 1, a printed netpage 1 can represent a interactive form which can be filled in by the user both physically, on the printed page, and "electronically", via communication between the pen and the netpage system. The example shows a "Request" form containing name and address fields and a submit button. The netpage consists of graphic data 2 printed using visible ink, and coded data 3 printed as a collection of tags 4 using invisible ink."*

(ii) On page 10, lines 22 to 26 of the specification, the netpage printer 601 is described as printing netpages:

"The netpage printer 601, preferred forms of which are described in our earlier application USSN 09/575,155 (docket no. NPP003US) and our co-filed application USSN 09/693,514 (docket no. NPS024US), is able to deliver, periodically or on demand, personalized newspapers, magazines, catalogs, brochures and other publications, all printed at high quality as interactive netpages."

Additional disclosure of the manner in which netpage printers encode and print the coded data contained in netpages, can be found in cross-referenced United States patent application No. 09/575,109 (PEC02US).

(iii) Since *"netpages"* include both coded data and graphic data and since the netpage printer 601 is described as printing netpages, one of ordinary skill in the art would understand that the netpage printer is described as printing both the coded data and the graphic data substantially simultaneously.

(iv) In Figure 14 and on page 24, lines 15 to 18 of the specification the netpage printer is described as printing netpages in which the *"graphic data"* takes the form of maps of countries, regions, cities and areas.

"If the user selects a point on a map or globe and clicks the <Print Country Map> button, a map 524 of the selected country is printed. The user may also print a map 524 of the selected location (country, region, or city) by clicking the <Print Map> button on the Information page, as shown in Figure 14."

(v) Since maps of countries, regions, cities and areas are maps of *"geographic areas"* and since the netpage printer is described as printing netpages containing such maps of geographic areas, one of ordinary skill in the art would understand that the method being described involves *"the map*

of the geographic area and the coded data being printed substantially simultaneously."

(vi) For these reasons, the Applicant submits that *"the map of the geographic area and the coded data being printed substantially simultaneously"* was in the specification as filed and asks that the Examiner withdraw this objection.

(b) *"generating the indicating data based at least partially on sensing at least some of the coded data in the vicinity of the position":*

(i) Page 13, line 28 to page 14 line 3 of the specification describes the netpage pen as generating the page identifier and position of the pen relative to the page (one example of indicating data) by sensing the tags (coded data) even on a single click on the page (in the vicinity of the position of the sensing device):

"A tag is sensed by an area image sensor in the netpage pen, and the tag data is transmitted to the netpage system via the nearest netpage printer. The pen is wireless and communicates with the netpage printer via a short-range radio link. Tags are sufficiently small and densely arranged that the pen can reliably image at least one tag even on a single click on the page. It is important that the pen recognize the page ID and position on every interaction with the page, since the interaction is stateless."

(ii) The netpage pen is therefore described as *"generating the indicating data based at least partially on sensing at least some of the coded data in the vicinity of the position."*

(iii) For this reason, the Applicant submits that *"generating the indicating data based at least partially on sensing at least some of the coded data in the vicinity of the position"* was in the specification as filed and asks that the Examiner withdraw this objection.

(c) *"the printer being adapted to print the map and the coded data substantially simultaneously":*

(i) The arguments and specification extracts mentioned in paragraph (a) of this section apply equally to this claim feature.

(d) *"comprising a non-electronic printed surface displaying coded data indicative of a plurality of reference points of the globe":*

(i) Page 20, lines 29 and 30 describe a globe printed as a netpage:

"The surface of a globe (i.e. a sphere representing the earth) can also be printed as a netpage."

Further disclosure of netpage tags being applied to a spherical surface, such as a globe, can be found in cross-referenced United States patent application No. US 09/575,129 (NPT002) in the section entitled *"8.1.2 Spherical Surface Tag Tiling"* beginning at the end of page 74.

(ii) Page 9, lines 25 to 27 describe netpages as being printed on ordinary paper:

"In its preferred form, the netpage system relies on the production of, and human interaction with, netpages. These are pages of text, graphics and images printed on ordinary paper or other media, but which work like interactive web pages."

(iii) *"Ordinary paper"* is a non-electronic surface.

(iv) Since these passages disclose a globe printed as a netpage, and since a netpage is a non-electronic printed surface, these passages disclose a globe *"comprising a non-electronic printed surface displaying coded data indicative of a plurality of reference points of the globe."*

(v) For these reasons, the Applicant submits that a globe *"comprising a non-electronic printed surface displaying coded data indicative of a plurality of reference points of the globe"* was in the specification as filed and asks that the Examiner withdraw this objection.

It is respectfully submitted that all of the Examiner's objections have been successfully traversed. Accordingly, it is submitted that the application is now in condition for allowance. Reconsideration and allowance of the application is courteously solicited.

Very respectfully,

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